Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington DC 20554

In the Matter of Octatron, Inc. and Chang Industry, Inc. For waiver of Sections 15.247(b), 15.247(e), and 15.249(a) of the Rules and Regulations s	ET Docket No. 05-356

REPLY COMMENTS OF MOTOROLA, INC.

Motorola, Inc. (Motorola) hereby submits these reply comments in response to the comments filed in the above-captioned proceeding concerning the request by Octatron, Inc., and Chang Industry, Inc., for a waiver of certain Part 15 regulations in order to permit Octatron and Chang to market in the United States analog audio-video transmitters that would operate in the 902 – 928 MHz band without complying with the requirements of the rules designed to foster compatibility among the myriad of disparate users of the band. For the reasons set forth herein, Motorola agrees with the commenters that the Commission should deny the requested waiver.

In order to justify a waiver of the rules, petitioners must, at a minimum, show that the underlying purposes of the rule would not be served by its application to the petitioners and that grant of the relief is otherwise in the public interest.[1] As many of those commenting on the Petition noted, the Petitioners have failed to show that the devices could not have been designed in accordance with the rules and to demonstrate

[1] The Petitioners cite Section 1.925 of the Commission's Rules. This section does not literally apply as it governs the processing of waivers by the Wireless Telecommunications Bureau. Even under a generic approach, however, the Petitioners have not made the required showing. *See generally* WAIT Radio v. FCC, 418 F.2d 1153 (D.C. Cir., 1969, rehearing denied, 459 F.2d 1203 (D.C. Cir. 1972), cert denied 409 U.S. 1027.

that the devices would not produce greater interference to other users of the band than would compliant products.[2] In this regard, commenters noted the important uses conducted in the 902 – 928 MHz band including the Sprint Nextel Direct Talk feature that permits unit-to-unit communications among certain Sprint Nextel transceivers even when the network is not available,[3] supervisory control and data acquisition as well as automatic meter reading for utilities,[4] location and monitoring systems,[5] and hospital wireless phone systems.[6] This band also supports cost effective broadband solutions such as provided by our MotoWi4 portfolio. A component of this portfolio is Canopy which relies on the characteristics of 900 MHz to provide links of more than 40 miles, under line-of-sight conditions, to reach rural and sparsely populated areas.[7]

The Petitioners have blithely asserted that their proposed operations 'will not create significant interference" and that whatever interference is created "will be limited to the immediate area of emergency, temporary operations or to defined training areas and will serve the higher public interest objectives of safety to life and improve security."[8] However, as others have noted the petition is woefully devoid of technical analysis or even basic information such as bandwidth of the proposed signals so that the

---

2 *See*, *e.g.*, Comments of the National Association of for Amateur Radio (ARRL) at 6 – 7.

3 Comments of Sprint Nextel at 1 – 2.

4 Comments of American Petroleum Institute at 2; Cellnet Technology, Inc., at 3; and Sensus Metering Systems at 2.

5 Comments of Warren C. Havens and Telesaurus Holdings GB, LLC at 4.

6 Comments of SpectraLink Corporation at 1.

7 *See*, http://motorola.canopywireless.com/fp/downlink.php?id=63ef9d0b939844311b4e18f41adb9d45

8 Petition at 3.

Commission and others may better analyze the interference potential of the devices. As such, both the Commission and others are left to speculate. What seems apparent, however, is that the devices would inject a high level of power at least around the video carrier that is far in excess of the 8 dBm in any 3 kHz limit imposed by Section 15.247(d).[9] As such, this would disrupt the balance that the Commission has sought to achieve in order to accommodate a wide variety of users in the 902 – 928 MHz band.[10]

The record also points out that the Petitioners have proposed no limitations on the marketing and use of their proposed devices. While advocating grant of their waivers on the basis of purported public safety benefits, the petitioners avoided proposing to limit the advertising and sale of their devices to those eligible to be licensed in the public safety pool of frequencies.[11] As the commenters noted, if despite the technical shortcomings of the Petition, the Commission nonetheless grants waivers, the agency should condition any such extraordinary relief to limit the advertising and sale of the devices solely to public safety agencies.[12]

---

9 The Petition simply discloses very little as to the nature of the analog waveform. If one posits a conventional NTSC composite signal of the sort commonly employed in broadcast television, the lower sideband might be a 1.25 MHz vestige of the luminance signal while the upper sideband would be largely unsuppressed and then followed by a color subcarrier and an aural subcarrier. However, it would be far cheaper to dispense with the vestigial sideband filter and transmit a double sideband signal. Indeed, economy appears to be one of the chief selling points in the Petitioners' proposal.

10 Comments of IEEE 802.18 at 2; Cellnet at 2.

11 47 C.F.R. § 90.15 (2004).

12 ARRL at 4; American Petroleum Institute at 2; and Cellnet at 3-4.

The 902 – 928 MHz band accommodates a wide variety of government and non-government uses. The careful compromises developed by the Commission for this band have led to the development of numerous technologies that have improved safety, transportation efficiency, and convenience for millions of users. The Commission should not risk disrupting these operations in order to grant a collection of unsupported waiver requests. In order that the innovation in this band may continue in an orderly fashion, Motorola urges the Commission to deny the Petition for Waiver submitted by Octatron, Inc., and Chang Industry, Inc.

Respectfully submitted,
Motorola, Inc.

/*S/ Steve B. Sharkey*
Steve B. Sharkey
Director, Spectrum and Standards Strategy

/*S/ Robert D. Kubik, Ph.D.*
Robert D. Kubik, Ph.D.
Director, Telecom Relations Global

1350 I Street, NW
Suite 400
Washington, D.C. 20005
202.371.6900

February 14, 2006